In the Claims

1. (Currently amended) A motion estimation method comprising:

identifying one or more pixels in a first frame of a multi-view video sequence;

constraining a search range associated with a second frame of the multi-view video sequence ~~based upon an indication of~~ to an area relative to a position of an epipolar line in the second frame, wherein the epipolar line corresponds to the one or more pixels in the first frame, the area is defined by a desired correlation between efficient ~~coding~~compression and semantic accuracy, and the semantic accuracy ~~relying~~ relies on use of geometric configurations of cameras capturing the multi-view video sequence; and

searching the second frame within the constrained search range for a match of the one or more pixels identified in the first frame for subsequent use in computing a motion vector for the one or more pixels.

2. (Currently amended) The method of claim 1 wherein ~~the search range is constrained with respect to a position in the second frame of a epipolar line corresponding to the one or more pixels in the first frame,~~ the position of the ~~corresponding~~ epipolar line ~~depending~~ depends on the geometric configurations of the cameras.

3. (Original) The method of claim 1 wherein the one or more pixels in the first frame represent a block.

4. (Currently amended) The method of claim ~~2~~ 1 further comprising:

computing the epipolar line in the second frame.

5. (Original) The method of claim 4 wherein the epipolar line is computed using a fundamental matrix.

6. (Currently amended) The method of claim ~~2~~ 1 wherein constraining the search range comprises:

finding a position of an initial seed on the epipolar line; and

determining parameters of a window covering the initial seed and the epipolar line based on the desired correlation between efficient ~~coding~~compression and semantic accuracy.

7. (Original) The method of claim 6 wherein the position of the initial seed is found using a disparity vector.

8. (Currently amended) The method of claim 1 further comprising:

receiving ~~the indication of~~ the desired correlation between efficient ~~coding~~compression and semantic accuracy from a user.

9. (Currently amended) The method of claim 8 further comprising:

communicating to a user a user interface facilitating user input of the desired correlation between efficient ~~coding~~compression and semantic accuracy.

10. (Currently amended) The method of claim 9 wherein the user interface provides a slider to enable the user to specify the desired correlation between efficient ~~coding~~compression and semantic accuracy.

11. (Currently amended) The method of claim 9 wherein the user interface allows the user to modify a previously specified correlation between efficient ~~coding~~compression and semantic accuracy at any time.

12. (Currently amended) A computer readable storage medium that provides computer program instructions, which when executed on a processor for a computer cause the processor to perform ~~a method~~ operations comprising:

identifying one or more pixels in a first frame of a multi-view video sequence;

constraining a search range associated with a second frame of the multi-view video sequence ~~based upon an indication of~~ to an area relative to a position of an epipolar line in the second frame, wherein the epipolar line corresponds to the one or more pixels in the first frame, the area is defined by a desired correlation between efficient

~~coding~~compression and semantic accuracy, and the semantic accuracy ~~relying~~ relies on use of geometric configurations of cameras capturing the multi-view video sequence; and

searching the second frame within the constrained search range for a match of the one or more pixels identified in the first frame for subsequent use in computing a motion vector for the one or more pixels.

13. (Currently amended) The computer readable storage medium of claim 12 wherein ~~the search range is constrained with respect to a position in the second frame of a epipolar line corresponding to the one or more pixels in the first frame,~~ the position of the ~~corresponding~~ epipolar line ~~depending~~ depends on the geometric configurations of the cameras.

14. (Currently amended) The computer readable storage medium of claim 12 wherein the one or more pixels in the first frame represent a block.

15. (Currently amended) The computer readable storage medium of claim ~~13~~ 12 wherein the ~~method~~ operations further comprises:

computing the epipolar line in the second frame.

16. (Currently amended) The computer readable storage medium of claim 15 wherein the epipolar line is computed using a fundamental matrix.

17. (Currently amended) The computer readable storage medium of claim ~~13~~ 12 wherein constraining the search range comprises:

finding a position of an initial seed on the epipolar line; and

determining parameters of a window covering the initial seed and the epipolar line based on the desired correlation between efficient ~~coding~~compression and semantic accuracy.

18. (Currently amended) The computer readable storage medium of claim 17 wherein the position of the initial seed is found using a disparity vector.

19. (Currently amended) The computer readable storage medium of claim 12 wherein the ~~method~~ operations further comprises:

communicating to a user a user interface facilitating user input of the desired correlation between efficient ~~coding~~compression and semantic accuracy.

20. (Currently amended) A computerized system comprising:

a memory; and

at least one processor coupled to the memory, the at least one processor executing a set of instructions which cause the at least one processor to

identify one or more pixels in a first frame of a multi-view video sequence,

constrain a search range associated with a second frame of the multi-view video sequence ~~based upon an indication of~~ to an area relative to a position of an epipolar line in the second frame, wherein the epipolar line corresponds to the one or more pixels in the first frame, the area is defined by a desired correlation between efficient ~~coding~~compression and semantic accuracy, and the semantic accuracy ~~relying~~ relies on use of geometric configurations of cameras capturing the multi-view video sequence, and

search the second frame within the constrained search range for a match of the one or more pixels identified in the first frame for subsequent use in computing a motion vector for the one or more pixels.

21. (Currently amended) The system of claim 20 wherein ~~the search range is constrained with respect to a position in the second frame of a epipolar line corresponding to the one or more pixels in the first frame,~~ the position of the ~~corresponding~~ epipolar line ~~depending~~ depends on the geometric configurations of the cameras.

22. (Original) The system of claim 20 wherein the one or more pixels in the first frame represent a block.

23. (Currently amended) The system of claim ~~21~~ 20 wherein the processor is to constrain the search range by finding a position of an initial seed on the epipolar line, and

determining parameters of a window covering the initial seed and the epipolar line based on the desired correlation between efficient ~~coding~~compression and semantic accuracy.

24. (Original) The system of claim 23 wherein the processor is to find the position of the initial seed using a disparity vector.

25. (Currently amended) The system of claim 20 wherein the processor is further to communicate to a user a user interface facilitating user input of the desired correlation between efficient ~~coding~~compression and semantic accuracy.

26. (Currently amended) A motion estimation apparatus comprising:

a block identifier to identify one or more pixels in a first frame of a multi-view video sequence;

a search range determinator to constrain a search range associated with a second frame of the multi-view video sequence ~~based upon an indication of~~ to an area relative to a position of an epipolar line in the second frame, wherein the epipolar line corresponds to the one or more pixels in the first frame, the area is defined by a desired correlation between efficient ~~coding~~compression and semantic accuracy, and the semantic accuracy ~~relying~~ relies on use of geometric configurations of cameras capturing the multi-view video sequence; and

a searcher to search the second image within the constrained search range for a match of the one or more pixels identified in the first frame for use by a motion vector calculator to compute a motion vector for the one or more pixels.

27. (Currently amended) The apparatus of claim 26 wherein ~~the search range is constrained with respect to a position in the second frame of a epipolar line that corresponds to the one or more pixels in the first frame,~~ the position of the ~~corresponding~~ epipolar line ~~depending~~ depends on the geometric configurations of the cameras.

28. (Original) The apparatus of claim 26 wherein the one or more pixels in the first frame represent a block.

29. (Currently amended) The apparatus of claim ~~27~~ 26 wherein the search range determinator is further to compute the epipolar line in the second frame.

30. (Currently amended) The apparatus of claim ~~27~~ 26 wherein the search range determinator is to constrain the search range by finding a position of an initial seed on the epipolar line, and determining parameters of a window covering the initial seed and the epipolar line based on the desired correlation between efficient ~~coding~~compression and semantic accuracy.

31. (Currently amended) The apparatus of claim 26 wherein the search range determinator is further to communicate to a user a user interface facilitating user input of the desired correlation between efficient ~~coding~~compression and semantic accuracy.